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On November 14, 2005

TOWNSEND and TOWNSEND and CREW LLP

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PATENT
Attorney Docket No. 021756-018700US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Christopher E. AXE et al.

Application No.: 09/636,418

Filed: August 10, 2000

For: VISUAL CONFIGURATOR

Customer No.: 51206

Confirmation No. 6284

Examiner: Gregory J. Vaughn

Technology Center/Art Unit: 2178

BRIEF ON APPEAL

Commissioner for Patents
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Sir:

This brief is submitted in an Appeal from the Final Office Action of 01/27/2005 (paper 20) rejecting Claims 1-35 of the above-referenced patent application and in response to the Office Action mailed September 9, 2005. Appendix I, attached hereto, contains a copy of all claims pending in this case.

A Notice of Appeal was timely filed on April 27, 2005, and a request for a one-month extension of time for filing this Appeal Brief is being filed simultaneously with this Brief.

I. Real Party in Interest

The real party in interest in the above-referenced patent application is Peoplesoft, Inc. of Pleasanton, California.

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II. Related Appeal and Interferences

To the knowledge of Applicants' legal representative, there are no related appeals or interference proceedings which will directly affect, or be directly affected by, or have a bearing on, the Board's decision in this Appeal.

III. Status of Claims

Claims 1-35 are pending in this application.

Claim 34 is rejected under 35 U.S.C. 112, ¶ 1, as failing to comply with the written description requirement.

Claim 34 is rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claims 1-3, 6-9, 14-17, 23-30, and 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Henson, US Patent 6,167,383 (filed 09/22/1998).

Claims 4, 5, 11-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson.

Claims 10, 21, 22, 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson in view of King et al., US Patent 6,161,114 (filed 4/14/1999).

IV. Status of Amendments

Claims 1-15 were included in the application as filed. Claims 16-33 were added by amendment filed March 24, 2004. The Examiner entered this Amendment. Claims 34-35 were added by amendment filed September 15, 2004. The Examiner entered this Amendment. No further claim amendments have been submitted.

V. Summary of the Claimed Subject Matter

The present invention is directed to systems and methods of visually configuring a product in a graphical user interface, examples of which are illustrated in FIGS. 2 through 7. In various embodiments, the invention provides for a user to select one of a plurality of objects (e.g., FIG. 2 items 210-230) that can be placed in a plurality of slots (e.g., FIG. 2 items 252-285). Once an object is selected there is more than one slot in which it can be placed. The selection and placement can occur through a drag-and-drop process in which immediate feedback is provided regarding the ability to drop a selected object in a particular slot.

The feedback is optionally provided before or while the object is being placed in a selected slot. For example, FIGs. 3 through 6 show a drag-and-drop process that is discussed in part on page 9 line 1 through page 10 line 3, and page 16 lines 3-18 (page numbers refer to the application as filed). In this example, the immediate feedback is shown as a large "X" (Item 410) in FIG. 4, and, as described on page 13 lines 10-18, this "X" appears as the user is dragging the object over a particular slot, prior to placement of the object in the slot.

The immediate feedback can be provided before a selected object is actually placed in a slot because embodiments of the invention include forward-looking rules tables and a user intelligence for generating the feedback. The forward-looking rules tables are described, for example, on page 10 line 16 through page 13 line 4. The user intelligence is characterized, and contrasted with "server side intelligence," for example, on page 10 lines 4-18.

The visual configuration layout is optionally representative of the actual physical layout of the product. For example, FIGS. 2 through 7 represent the actual physical layout of an electronics rack (Equipment Frame) and the displayed positions of slots within this rack are representative of actual physical slots within the rack.

VI. Grounds of Rejection to be Reviewed on Appeal

Issue 1: Whether Claim 34 was properly rejected under 35 U.S.C. 112, ¶ 1, as failing to comply with the written description requirement.

Issue 2: Whether Claim 34 was properly rejected under 35 U.S.C. 101 as being directed to nonstatutory subject matter.

Issue 3: Whether Claims 1-3, 6-9, 14-17, 23-30, and 32-34 were properly rejected under 35 U.S.C. 102(b) as being anticipated by Henson, US Patent 6,167,383 (filed 09/22/1998).

Issue 4: Whether Claims 4, 5, 11-13 and 18-20 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Henson.

Issue 5: Whether Claims 10, 21, 22, 31 and 35 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Henson in view of King et al. US Patent 6,161,114 (filed 4/14/1999).

VII. Argument

A. Whether Claim 34 was properly rejected under 35 U.S.C. 112, ¶ 1, as failing to comply with the written description requirement.

Claim 34 recites:

34. *The method of claim 1, wherein the selection of one of the plurality of selectable objects occurred prior to the selection of one of the plurality of slots.*

The Examiner contends that "*occurred prior to*" has no support in the specification. See paragraph 4 of Office Action dated 1/27/2005. Applicants respectfully traverse this rejection.

The temporal relationship of first selecting an object (donor) before selecting a place (slot) to put the object is implicit in the process of dragging an object into a slot. Additionally, Fig. 3 shows object 310 at a state where it has been selected, but before it has been actually placed in a slot. At page 9, lines 3-4, the specification states that "Fig. 3 also depicts that an instance 310 of donor 215 has been chosen by the user, and the user is in the process of determining where to place it." If the user has already chosen (selected) the object, but has not determined (selected) where to place it, the selection of the object has *occurred prior to* the selection of the slot.

Therefore the specification does support the subject matter of claim 34, and Applicants respectfully request withdrawal of the rejection.

B. Whether Claim 34 was properly rejected under 35 U.S.C. 101 because the claimed invention is directed to nonstatutory subject matter.

The Examiner contends that the method of claim 34 is directed to nonstatutory subject matter because it is not embodied on a computer readable medium. As support, the Examiner states "[m]ethods not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. ... See MPEP § 2106 (IV.[B.]1.a)," and that there is "no functional interrelationship with the way in which computing processes are performed see MPEP § 2106 (IV.[B.]1.b)." See paragraph 7 of Office Action dated 1/27/2005.

However, the rule in MPEP § 2106 (IV.[B.]1.a) is concerned with "data structures" not embodied in computer-readable media, and not for a process that includes concrete steps performed according to a computer program. "When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim", and not as nonstatutory functional descriptive material. See MPEP § 2106 (IV.B.1.a). "Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory." See MPEP § 2106 (IV.B.1.a).

Claim 34 depends on claim 1, for which there is a non-contested, sufficient functional change in the computer from the recited steps of the method. Claim 34 prescribes that two steps of claim 1 are done in a certain order, thus the claim as a whole still causes functional change in the computer, just with a more specific order.

Furthermore, claim 34 does define a functional interrelationship with the way in which the computing processes were performed. MPEP § 2106 (IV.B.1.b) is concerned with descriptive material such as music, literature, art, and photographs that have no functional relationship with the computing processes, but are only unrelated data content. The order of certain computer processes is not unrelated data content, but is a functional change on how an end result is achieved.

Accordingly, Applicants respectfully request that this rejection be withdrawn.

C. Whether claims 1-3, 6-9,14-17, 23-30, and 32-34 were properly rejected under 35 U.S.C. 102(b) as being anticipated by Henson, US Patent 6,167,383, filed 09/22/1998.

Under 35 U.S.C. 102(b) "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

1. Claims 1-35

Claim 1 recites:

1. *A method for visually configuring a product by placing a plurality of selectable components into a plurality of slots, comprising:*

- (a) *initializing a configuration layout with proper state;*
- (b) *receiving a selection of one of the plurality of selectable objects, and of one of the plurality of slots in which the selected object may be placed,*
- (c) *providing visual feedback indicating a validity of the selections;*
- (d) *receiving a placement of the selected object;*
- (e) *receiving input regarding the placement from a remote inference engine;*
- (f) *updating the visual feedback as needed based on the received input; and*
- (g) *repeating steps (b) through (f) until no more selections are received.*

a. It is the position of the Applicants that the cited art does not teach "(d) *receiving a placement of the selected object.*" In this claim limitation, a placement of a previously selected object is received.

Henson teaches selection of an item, already located within a field, from a pull-down menu. For example, in FIGS. 3A-3I3, Henson teaches a series of fields for configuring a computer system. Each field appears to include a dropdown list of items that can be selected. As such, each item (e.g., 96 MB SDRAM or 16.8GB 5400rpm Ultra ATA Hard Drive, etc.) appears to be located within one particular field prior to selection. There is, therefore, no reason for Henson to teach a separate placement of a selected item because the item is already within its field.

Furthermore, even if, for the sake of argument, it were assumed that the selection of an item from a dropdown list of Henson anticipates "(b) *receiving a selection of one of the plurality of selectable objects,*" there does not appear to be a separate teaching of receiving of a **placement** of the selected object. Because, in Henson, the selected item is located within a field prior to selection, there is no reason for a placement of the selected item to be sent or received following the selection. Thus, the Applicants are unable to find teaching of both a "selection" and a separate "placement of the selected object" in Henson.

In contrast with the teachings of Henson, Claim 1 recites both a "*selection*" and a "*placement*" of an object. Specifically, Claim 1 recites both "(b) *receiving a selection of one of*

the plurality of selectable objects" and "(d) receiving a placement of the selected object" as two separate steps. The "*selection*" is distinct from the separate "*placement*." Specifically, the "*selection*" is received in step "(b)" of Claim 1, while the "*placement*" is received in separate step "(d)." Therefore, it is the position of the Applicants that the cited art does not teach the limitations "*receiving a placement of the selected object*," as recited in Claim 1.

b. It is the position of the Applicants that the cited art does not teach "(b) *receiving a selection of one of the plurality of selectable objects, and of one of the plurality of slots in which the selected object may be placed.*" In these claim limitations, the phrase "*in which the selected object may be placed*" characterizes "*the plurality of slots.*" Thus, a selected object may be placed in one of a plurality of alternative slots.

While, Henson does teach a plurality of fields and a plurality of items to be selected within each field, this teaching does not anticipate the above limitations. Specifically, in Henson a selected item cannot be placed in one of a plurality of alternative fields. For example, Henson does not appear to teach that the "96MB SDRAM" (FIG. 3A) could be placed alternatively in the "Monitor" field or the "Speakers" field. In Henson one cannot select an item from a drop-down list within one field in order to place that item in another field. This would be contrary to the well known functionality of drop-down lists. Thus, even though there are a plurality of fields taught in Henson, only a single member of this plurality is available to an item that has been selected. There are not a "plurality of slots in which the selected object may be placed."

The Applicants are unable to identify any teaching within Henson that suggests that a user can "place" or "move" an item to alternative fields. Each selected item taught in Henson is already located within a single field (i.e., not a plurality of fields) and cannot be placed in another field after selection. Thus, Henson does not teach "*one of a plurality of slots in which the selected object may be placed,*" as recited in Claim 1.

Even if, arguendo, one were to assume that Henson teaches placement of a selected item in a slot, there is only a single slot into which a selected item can be placed, not a "plurality of slots in which the selected object may be placed," as recited in Claim 1. Again, while it remains Applicants' position that this is not placement of a selected item, a selected item can only be placed within the slot with which it resided prior to its selection. Thus, the Applicants are unable

to identify any teaching in Henson that would imply that this placement is in "one of a plurality of slots in which the selected object may be placed," as recited in Claim 1.

c. The Examiner has suggested that "*receiving a placement of the selected object*" included ambiguous language because it was not clear what a "placement" was. The Applicants believe that this language is not ambiguous in light of the plain meaning of the word "placement" and of the use of the word "*placement*" in the specification as filed. For example, FIGs. 3-7 show a process by which an object is dragged across a graphical user interface and placed in a slot. Therefore, it is the Applicants' position that the specification properly characterizes the term "placement," that this characterization is consistent with the plain meaning, and that given this characterization the wording of the claim is not ambiguous. The American Heritage® Dictionary of the English Language, Fourth Edition defines "placement" as "*a) the act of placing or arranging, or b) the state of being placed or arranged.*"

d. Because at least the above limitations of Claim 1 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 1 under 35 U.S.C. 102(b) and that Claim 1, and Claims 33-34 that depend therefrom, are in condition for allowance.

e. Applicants submit that independent Claims 2, 9, 12, 14, 15, 16, 24, and 29 should be allowable for at least the same rationale as discussed with respect to claim 1. Claims 3-8 depend from Claim 2; Claims 10-11 depend from Claim 9; Claim 13 depends from Claim 12; Claims 17-23 and 35 depend from Claim 16; Claims 25-28 depend from Claim 24; and Claims 30-32 depend from Claim 29 and thus derive patentability at least therefrom.

2. Claims 2-8, 15

Claim 2 recites:

2. *A method for visually configuring a product by placing a plurality of selectable components into a plurality of slots, comprising:*
 - (a) *initializing a configuration layout with proper state;*
 - (b) *receiving a selection of one of the plurality of selectable objects, and of one of the plurality of slots in which the selected object may be placed;*
 - (c) *looking up a set of constraints on the placement of the selected object;*
 - (d) *receiving a placement of the selected object,*

- (e) *receiving input regarding the placement from a remote inference engine;*
- (f) *implementing the received input,*
- (g) *storing a new set of constraints based on the placement of the selected object; and*
- (h) *repeating steps (b) through (g) until no more selections are received.*

a. It is the Applicants' position that Claim 2 is allowable for the same reasons discussed above with respect to Claim 1. Specifically, Henson does not teach "(b) ... one of a plurality of slots in which the selected object may be placed," or "(d) receiving a placement of the selected object."

b. In addition, it is the position of the Applicants that the cited art does not teach "(g) storing a new set of constraints," much less that the stored "*constraints [are] based on the placement of the selected object,*" as recited in Claim 2.

It is the position of the Applicants that "constraints" are rules regarding, for example, what objects can be combined in a product. For example, "constraints" are rules that are either violated or not violated. See, for example, page 13 line 19 of the specification as filed.

Henson does teach saving a shopping cart containing items selected for purchase. For example, at col. 10 lines 52-54, Henson teaches "A user can place an item into the cart, back out of the store, re-enter and place another item in the cart..." However, the Applicants are unable to identify any teaching within Henson that constraints, much less a new set of constraints associated with placement of a selected item, are included in the saved cart. Items selected for purchase are not constraints because, among other reasons, they are not rules that can be considered to be violated or not violated. Therefore, a teaching that a shopping cart including items for purchase can be saved does not teach "*storing a new set of constraints*" as recited in Claim 2.

c. Because at least the above limitations of Claim 2 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 2 under 35 U.S.C. 102(b) and that Claim 2 is in condition for allowance. As Claim 2 is allowable, dependent Claims 3-8 are also allowable for at least the same rationale.

d. Applicants submit that independent Claim 15 should be allowable for at least the same rationale as discussed with respect to Claim 2.

3. Claims 9-13

Claim 9 recites:

9. *A system for visually configuring a product from a plurality of selectable components, comprising:*
- a user interface for displaying the plurality of selectable components and a plurality of slots into which the plurality of selectable components can be placed, and*
 - a user intelligence communicatively coupled to the user interface, for receiving a set of constraints from a remote inference engine and implementing the set of constraints.*

a. It is the Applicants' position that Claim 9 is in condition for allowance for at least reasons discussed above with respect to Claim 1. For example, Henson does not teach "*a plurality of slots into which the plurality of selectable components can be placed.*"

b. It is further the position of the Applicants that the cited art does not teach "*a user intelligence communicatively coupled to the user interface, for receiving a set of constraints from a remote inference engine.*" The term "user intelligence" refers to logic that is on a side of a client-server architecture remote from the inference engine, and is used to distinguish this logic from "*server side intelligence.*" For example FIG. 1 illustrates an embodiment in which "*User intelligence 140*" includes "*Forward-looking rules table Storage 150,*" "*Forward-looking rules implementor 155,*" "*Forward-looking rule table Interpreter 145,*" and "*Encoder of implementation 160.*" The Applicants are unable to identify any similar teaching in the cited art.

In rejecting Claim 9 the Examiner states "Henson discloses a user intelligence (described as '*user input*') coupled to a user interface...", (01/27/05 Office Action at page 21). The Applicants traverse this statement.

First, it is improper to equate an implied human user of the system of Henson with an element of the claimed system.

Second, the "*user intelligence*" included in Claim 9, and other claims, is characterized by the specification to have features (e.g., those shown in FIG. 1) that would not normally be

included in input received from a human user. Thus, equating "*user intelligence*" with a user's input is an interpretation of "*user intelligence*" that is inconsistent with the specification.

c. Because at least the above limitations of Claim 9 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 9 under 35 U.S.C. 102(b) and that Claim 9 is in condition for allowance. As Claim 9 is allowable, dependent Claims 10-11 are also allowable for at least the same rationale.

d. Applicants submit that Claim 12, and Claim 13 from which it depends, should be allowable for at least the same rationale as discussed with respect to Claim 9.

4. Claims 16-28 and 35

Claim 16 recites:

- 16 *A method of visually configuring a product by placing one or more of a plurality of objects into one or more slots, subject to a plurality of configuration rules, the method comprising:*
- (a) providing the plurality of objects and a predetermined product configuration layout to a client device for display within a graphical user interface, the product configuration layout including the one or more slots;*
 - (b) receiving, from the client device, a selection of one of the plurality of objects displayed within the graphical user interface and a selection of one of the one or more slots, the selection of the one of the plurality of objects and the selection of one of the one or more slots being for modification of the product configuration layout;*
 - (c) causing the graphical user interface to indicate that the selected object cannot be placed in the selected slot, if placing the selected object in the selected slot would violate one or more of the plurality of configuration rules; and*
 - (d) causing the graphical user interface to show the selected object within the selected slot, if placing the selected object in the selected slot would not violate any of the plurality of configuration rules.*

a. It is the Applicants' position that Claim 16 should be allowed for at least reasons similar to those discussed above with respect to Claim 1. Specifically, Henson does not teach "*slots in which the selected object may be placed,*" (Claim 1) and therefore does not teach "*indicat[ing] that the selected object cannot be placed in the selected slot*" (Claim 16).

b. It is further the Applicants' position that Henson does not teach "(c) *causing the graphical user interface to indicate that the selected object cannot be placed in the*

selected slot, if placing the selected object in the selected slot would violate one or more of the plurality of configuration rules," as recited in Claim 16.

Henson does teach an indication that a selection is incompatible after an item has been chosen within a field. See, for example, reference sign 86 of FIG. 3A. That this indication is provided after a user has already taken the trouble of choosing an item already within a field is a significant disadvantage of Henson.

In contrast with the teachings of Henson, the indications recited in the above claim elements occur prior to or during an attempted placement of "*the selected object*" in "*the selected slot*." This is supported by the language "*if placing the selected object in the selected slot would*" in Claim 16. The words "*if*" and "*would*" characterize determination of consequences of a future action. An advantage of the indication as recited in Claim 16 is seen in FIGS. 3 and 6 of the specification, wherein the indication is provided while a user is dragging a selected object toward a slot but before the object is dropped (e.g., placed) in the slot.

c. Because at least the above limitations of Claim 16 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 1 under 35 U.S.C. 102(b) and that Claim 16, and Claims 17-23 and 35 that depend therefrom, are in condition for allowance.

d. Applicants submit that independent Claim 24 should be allowable for at least the same rationale as discussed with respect to Claim 16. Claims 25-28 depend from Claim 24 and thus derive patentability at least therefrom.

5. Claims 23 and 28

Claim 23 recites:

23. *The method of claim 16 wherein the configuration layout is representative of a physical layout of the product.*

a. It is the Applicants' position that Claim 23 should be allowed for at least reasons similar to those discussed above with respect to Claim 16.

b. It is further the position of the Applicants that Henson does not teach "*wherein the configuration layout is representative of a physical layout of the product.*"

Henson does teach the selection of physical items, e.g., memory and hard drives, and these items are presented in a list on a user interface. Henson also shows a generic image of a computer in the upper left hand corner of FIG. 3A.

However, the Applicants are unable to identify any indication that these teachings represent "*a physical layout of the product.*" First, FIG. 3A of Henson shows configuration elements in the following order "Memory," "Hard Drive," "Monitor," "Video Card" "CD-Rom Drive," "Sound Card," "Speakers," "Storage Products," etcetera. There is no teaching within Henson that this order is a representation of the physical order or spatial relationship of these elements in the computer product being purchased. It is the Applicants' position that arranging these elements in this order within a computer would be a non-functional arrangement.

Second, the Applicants are unable to find any teaching that the generic image shown in the upper left hand corner of FIG. 3A is anything more than a generic and static representation of a computer unrelated to any particular physical configuration or selections made elsewhere in FIG. 3A. For example, there does not appear to be any teaching that the image changes in response to changes in the physical layout as a consequence of user selections. In addition, several options do not appear to be represented in this image (e.g., the Memory, Hard Drive, Video Card, Video Card and Speakers). Further, those options that are shown in the image do not seem to be in the order suggested by the order of configuration elements. For example, in the image, it appears that there is a hard drive at the top of the computer tower, while the Hard Drive option is second in the order of configuration elements.

Third, while Henson teaches individual physical elements of a product, e.g., "96 MB SDRAM," the common usage of the term "layout" refers to more than a single physical object. Specifically, layout refers to the spatial arrangement or positioning of a set of objects. For example, The American Heritage Dictionary of the English Language, Fourth Edition defines *layout* as "[a]n arrangement or a plan, especially the schematic arrangement of parts or areas."

c. Because at least the above limitations of Claim 23 are not taught in the cited art, and for at least the reasons discussed with respect to Claim 16, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 23 under 35 U.S.C. 102(b) and that Claim 23 is in condition for allowance.

d. Applicants submit that independent Claim 28 should be allowable for at least the same rationale as discussed with respect to Claim 23.

6. Claims 24-28

Claim 24 recites:

24. *A method of visually configuring a product by placing one or more of a plurality of objects into a slot, the method comprising:*
providing a product configuration layout to a client device for display within a graphical user interface, the product configuration layout including a slot for placement of one of the plurality of objects;
providing the plurality of objects to the client device for display within the graphical user interface;
receiving, from the client device, a selection of one of the plurality of selectable objects for placement within the slot,
causing the graphical user interface to show the selected selectable object within the slot if the selected object can be placed in the slot without violating a configuration rule; and
causing the graphical user interface to indicate that the selected object cannot be placed in the slot, if placing the selected object in the selected slot would violate the configuration rule.

a. It is the Applicants' position that Claim 24 is in condition for allowance for at least reasons similar to those discussed above with respect to Claims 1 and 16.

b. It is the Applicants' position that the cited art does not teach "*causing the graphical user interface to indicate that the selected object cannot be placed in the slot, if placing the selected object in the selected slot would violate the configuration rule.*"

Henson does teach at FIG. 3A reference sign 86 an indication that a current selection of an item violates a constraint.

However, an indication that a current configuration is in violation of a constraint is not equivalent to an indication "*that the selected object cannot be placed in the slot, if placing the selected object in the selected slot would violate the configuration rule.*". First, as recited in Claim 24, the indication occurs before or during an attempted placement of the object in the slot. Second, the indication occurs prior to, rather than after, violation of the configuration rule.

Third, as illustrated in FIG. 3A of Henson the item is already in the field when the indication is displayed to a user. In contrast, according to Claim 24 "*the selected object cannot be placed in the slot.*" The claim limitation that "*the selected object cannot be placed in the slot*" is not taught by FIG. 3A of Henson which shows an indication where an item is in the field. In fact, because Henson shows the item in the field and Claim 24 recites that "*the selected object cannot be placed in the slot,*" the teaching of Henson is in direct contradiction with these limitations of Claim 24.

c. Because at least the above limitations of Claim 24 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 24 under 35 U.S.C. 102(b) and that Claim 24 is in condition for allowance. As Claim 24 is allowable, dependent Claims 25-28 are also allowable for at least the same rationale.

7. Claims 29-32

Claim 29 recites:

29. *A method of configuring a product for purchase, the method comprising:*
selecting the product for purchase, the product having a plurality of alternative configurations, the plurality of alternative configurations being limited by a plurality of configuration rules;
viewing a first configuration of the plurality of alternative configurations and a plurality of objects, within a graphical user interface, the viewed first configuration including one or more slots within which at least one of the plurality of objects may be placed;
specifying a second configuration of the selected product by selecting a first of the plurality of objects for placement in a first of the one or more slots, the placement of the first of the plurality of objects in the first of the one or more slots being limited by a subset of the plurality of configuration rules, the selection of the first of the plurality of objects being made using the graphical user interface.

a. It is the Applicants' position that Claim 29 is in condition for allowance for at least reasons similar to those discussed above with respect to Claim 1. Specifically, Henson does not teach "*slots within which at least one of the plurality of objects may be placed,*" and "*selecting a first of the plurality of objects for placement in a first of the one or more slots.*"

b. It is the Applicants' position that the cited art does not teach "*specifying a second configuration of the selected product by selecting a first of the plurality of objects for placement in a first of the one or more slots,*" much less where "*the placement of the first of the plurality of objects in the first of the one or more slots being limited by a subset of the plurality of configuration rules.*" The Applicants are unable to identify any teachings in Henson that are interpretable as teaching these limitations.

With regard to Claim 29, the Examiner states "Henson discloses in Figure 3A, at reference sign 75 a subset of the configuration rules, in response to the selection of an object (as shown at reference sign 77)." Reference sign 75 is directed at what appears to be a generic textual description of the configuration category "Hard Drive," while reference sign 77 is directed at what appears to be a configuration category "Memory" including a selected option "96MB SDRAM." It is not clear to the Applicants how this teaches "*a subset of the plurality of configuration rules,*" as suggested by the Examiner. The referenced figure elements do not appear to be configuration rules much less a subset of configuration rules. Further, the reference items do not appear to be in response to "*selecting a first of the plurality of objects for placement in the first of the one or more slots,*" as recited in Claim 29.

c. Because at least the above limitations of Claim 29 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 29 under 35 U.S.C. 102(b) and that Claim 29, and Claims 30-32 which depend therefrom, are in condition for allowance.

8. Claim 30

Claim 30 recites:

30. *The method of claim 29, wherein the subset of the plurality of configuration rules is determined based on the first configuration.*

a. It is the Applicants' position that Claim 30 is in condition for allowance for at least the reasons discussed above with reference to Claim 29. Specifically, the Applicants are unable to identify any teaching within Henson concerning determination of a "*subset*" of configuration rules, much less a teaching that this determination is "*based on the first*

configuration." The Examiner has not responded to requests to point out such teaching or allow Claim 30.

b. Because at least the above limitations of Claim 30 are not taught in the cited art, it is the position of the Applicants that the Examiner has not presented a prima facie case for rejection of Claim 30 under 35 U.S.C. 102(b) and that Claim 30 is in condition for allowance.

D. Whether Claims 4, 5, 11-13 and 18-20 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Henson.

Under 35 U.S.C. 103(a), the scope and content of the prior art are to be determined, and the differences between the prior art and the claims at issue are to be ascertained. See Graham v. John Deere, 383 US 1, 148 USPQ 459 (1966).

1. Claims 4-5, 11-13, and 18

Claim 4 recites:

4. *The method of claim 2, wherein the step of looking up constraints comprises looking up a forward-looking rules table.*

Claim 5 recites:

5. *The method of claim 4, wherein the step of storing a new set of constraints comprises storing a new forward-looking rules table.*

a. It is the Applicants' position that Claims 4 and 5 are in condition for allowance for at least the reasons discussed above with respect to Claim 2, from which they depend.

b. It is the Applicants' position that the cited art does not teach a "*forward-looking rules table.*"

Henson does teach the use of configuration conflicts and it is suggested by the Examiner that these conflicts are responsive to a table of rules. However, in Henson configuration conflicts are detected after they occur. Any rules that are applied are looking back at the last

change in configuration. See for example, item 86 on FIG. 3A of Henson. These rules are, therefore, backward looking" rather than "forward-looking," as recited in Claims 4 and 5.

There is a substantial difference between forward-looking rules as recited in Claims 4 and 5, and backward-looking rules as are suggested to be taught by Henson. The Applicants provided an example of the characteristics of "*forward-looking rules table*," in the specification as filed:

"[F]orward-looking rules table [of the invention] is created based on the components selected by the user, and their placements. Based on each new selection and placement by a user, a new forward-looking rules table is created which lists the constraints on the *next* selection by the user. That is, the forward-looking rules table identifies which slots may or may not be occupied by which particular objects in the next selection by the user. (specification as filed page 11, emphasis in original).

In pointing out this text the Applicants are not attempting to read limitations from the specification into the claims. Rather, the Applicants are attempting to clarify the meaning of "*forward-looking rules table*," as recited in Claims 4 and 5, and elsewhere.

In contrast, any rules taught in Henson appear to be backward-looking rules because they detect conflicts after they occur. The Applicants are unable to find any teaching in Henson of constraints being applied "forward," that is, before a configuration change has been made. It is, therefore, the Applicants' position that the constraints taught in Henson are not forward-looking. There would, therefore, be no reason in Henson to employ a "*forward-looking rules table*" as recited in Claims 4 and 5.

Applicants note that the above arguments also apply to at least Claims 11, 12 and 18.

c. For at least the above reasons, it is the Applicants' position that Claims 4 and 5 are in condition for allowance.

d. Applicants submit that independent Claims 11-13 and 18 should be allowable for at least the same rationale as discussed with respect to Claims 4 and 5.

2. Claim 11

Claim 11 recites:

11. *The system of claim 9, wherein the user intelligence comprises:*
an interpreter for receiving a set of constraints from an inference engine;
a storage for storing the set of constraints;
an implementor for implementing the forward-looking rules stored in the table; and
an encoder for encoding and sending data regarding a user's current selection from the plurality of donors and the plurality of receptors to the inference engine.

a. It is the Applicants' position that Claim 11 is in condition for allowance for at least the same reasons as Claims 4 and 5 as discussed above, as well as Claim 9 from which it depends.

b. It is further the Applicants' position that the cited art does not teach "interpreter," "implementor," or "encoder" recited in Claim 11. The Applicants are unable to identify any such teaching and the Examiner has not pointed out specific sections of Henson that he believes teach these elements of Claim 11.

c. For at least the above reasons, it is the Applicants' position that Claim 11 is in condition for allowance.

3. Claims 12-13

Claim 12 recites:

12. *A system for visually configuring a product from a plurality of selectable components, comprising:*
on a client device:
a visual user interface for displaying the plurality of selectable components and a plurality of slots into which the plurality of selectable components can be placed;
a user intelligence communicatively coupled to the visual user interface for determining, by using a forward-looking rules table, the validity of placement of one of the plurality of selectable components into one of the plurality of slots; and
on a remote host device:

an inference engine communicatively coupled to the user intelligence, for storing rules and constraints governing placement of the plurality of selectable components, and for generating the forward-looking rules table.

a. It is the Applicants' position that Claim 12 is in condition for allowance for at least the reasons discussed above with respect to Claims 1, 4, 5 and 9. Specifically, Claim 12 includes "*a plurality of slots*," "*a forward-looking rules table*," and "*a user intelligence*" not taught by the cited art." As Claim 12 is allowable, dependent Claim 13 are also allowable for at least the same rationale.

4. Claim 19

Claim 19 recites:

19. *The method of claim 16 wherein a user intelligence stored on the client device is used to determine if placing the selected object in the selected slot would violate one or more of the plurality of configuration rules.*

a. It is the Applicants' position that Claim 19 is in condition for allowance for at least the reasons discussed above with respect to Claim 16 from which it depends, and also Claims 4, 5. Specifically, the cited art does not teach "*a user intelligence*."

b. It is the Applicants' position that Claim 19 is in condition for allowance because the prior art does not teach a "*user intelligence*" that is "*stored on the client device*." The Applicants are unable to find any teachings within the cited art of these limitations.

c. It is the Applicants' position that Claim 19 is in condition for allowance for reasons similar to those discussed above with respect to Claim 24. Specifically, the cited art does not teach a determination that occurs prior to an actual violation of a configuration rule or during an attempted violation of a configuration rule.

d. For at least the above reasons, it is the Applicants' position that Claim 19 is in condition for allowance.

5. Claim 20

a. It is the Applicants' position that Claim 20 is in condition for allowance for at least the reasons discussed above with respect to Claim 16, from which it depends.

E. Whether Claims 10, 21, 22, 31, and 35 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Henson in view of King et al. US Patent 6,161,114 (filed 4/14/1999).

1. Regarding the Motivation to Combine.

It is the position of the Applicants' that the Examiner has not provided sufficient motivation for the combination of King and Henson. With respect to the combination the Examiner states on page 17 of the January 27, 2005 office action:

[I]t would have been obvious, to one of ordinary skill, at the time the invention was made, to use the drag and drop teachings of King to enhance the object selection function of Henson to allow user the ability to "improve document production" (King, Column 6, line 7).

The only suggestion of a motivation provided by the Examiner is, thus, "to 'improve document production.'" However, "improved document production" is not related to the claimed invention nor is it a goal of Henson. Therefore, one of ordinary skill in the art would not think to combine Henson and King to achieve such an objective. Therefore, this motivation does not support the combination of art as suggested by the Examiner under 35 U.S.C. 103(a). Without providing a proper motivation to combine, the Examiner has failed to make a prima facie case for a rejection under 103(a). (See Graham v. John Deere, 383 US 1, 148 USPQ 459 (1966) and In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).)

2. Claim 10

a. It is the Applicants' position that Claim 10 is in condition for allowance for at least the reasons discussed above with respect to Claim 9, from which it depends.

3. Claim 21

a. It is the Applicants' position that Claim 21 is in condition for allowance for at least the reasons discussed above with respect to Claim 16, from which it depends.

4. Claim 22

Claim 22 Recites:

22. *The method of claim 16 wherein the selection of one of the plurality of objects and the selection of one of the one or more slots includes dragging the one of the plurality of objects to the one of the one or more slots within the graphical user interface, and wherein causing the graphical user interface to indicate that the selected object cannot be placed in the selected slot includes not allowing the dragged one of the plurality of objects to be dropped in the one of the one or more slots.*

a. It is the position of the Applicants that Claim 22 is in condition for allowance for at least the reasons discussed above with respect to Claim 16, from which it depends.

b. It is the position of the Applicants that the cited art does not teach "wherein causing the graphical user interface to indicate that the selected object cannot be placed in the selected slot includes not allowing the dragged one of the plurality of objects to be dropped in the one of the one or more slots," as recited in Claim 22. The Applicants have requested that the Examiner specifically point out these teachings in the cited art or allow Claim 22, however the Examiner has failed to cite specific examples. Rather, in the Office Action of 01/27/2005 (page 16) the Examiner made general statements regarding dependent Claims 10, 21, 22 and 31, without addressing the limitations, such as those above, that are unique to Claim 22.

c. For at least the above reasons, it is the position of the Applicants that Claim 22 is in condition for allowance.

5. Claim 31

a. It is the Applicants' position that Claim 31 is in condition for allowance for at least the reasons discussed above with respect to Claim 29, from which it depends.

6. Claim 35.

Claim 35 recites:

35. *The method of claim 16, wherein causing the graphical interface to indicate that the selected object cannot be placed in the selected slot occurs while attempting to place the selected object in the selected slot.*

a. It is the position of the Applicants that Claim 35 is in condition for allowance for at least the reasons discussed above with respect to Claim 16, from which it depends.

b. Further it is the position of the Applicants that the cited art does not teach "*causing the graphical interface to indicate that the selected object cannot be placed in the selected slot occurs while attempting to place the selected object in the selected slot,*" as recited in Claim 35.

In the Office Action of 01/27/2005, the Examiner stated "[r]egarding claim 35, the claim is directed toward [a] method for the system of claim 10 and is rejected using the same rationale," (page 17). In response, the Applicants pointed out that Claim 35 includes limitations, such as "*while attempting to place the selected object in the selected slot,*" that are not found in Claim 10. The Applicants also requested that the Examiner point out teachings of these limitations within the cited art or allow Claim 35. The Examiner has not responded to this request except to refer to his original statement.

c. For at least these reasons the Applicants believe that Claim 35 is in condition for allowance.

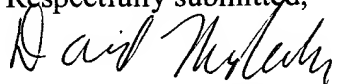
Appl. No. 09/636,418
Amdt. dated November 14, 2005
Brief on Appeal

PATENT

For all the foregoing reasons, it is requested that the Board of Patent Appeals and Interferences reverse the rejections of the Examiner regarding Claims 1-35 so that this case may be allowed and pass to issue in a timely manner.

Date November 14, 2005

Respectfully submitted,



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Appendix I

Claims:

- 1 1. (Original) A method for visually configuring a product by placing a
2 plurality of selectable components into a plurality of slots, comprising:
3 (a) initializing a configuration layout with proper state;
4 (b) receiving a selection of one of the plurality of selectable objects, and of
5 one of the plurality of slots in which the selected object may be placed;
6 (c) providing visual feedback indicating a validity of the selections;
7 (d) receiving a placement of the selected object;
8 (e) receiving input regarding the placement from a remote inference engine;
9 (f) updating the visual feedback as needed based on the received input; and
10 (g) repeating steps (b) through (f) until no more selections are received.
- 1 2. (Original) A method for visually configuring a product by placing a
2 plurality of selectable components into a plurality of slots, comprising:
3 (a) initializing a configuration layout with proper state;
4 (b) receiving a selection of one of the plurality of selectable objects, and of
5 one of the plurality of slots in which the selected object may be placed;
6 (c) looking up a set of constraints on the placement of the selected object;
7 (d) receiving a placement of the selected object;
8 (e) receiving input regarding the placement from a remote inference engine;
9 (f) implementing the received input;
10 (g) storing a new set of constraints based on the placement of the selected
11 object; and
12 (h) repeating steps (b) through (g) until no more selections are received.
- 1 3. (Original) The method of claim 2, further comprising:
2 transmitting information regarding the placement of the object to the inference
3 engine.

1 4. (Original) The method of claim 2, wherein the step of looking up
2 constraints comprises looking up a forward-looking rules table.

1 5. (Original) The method of claim 4, wherein the step of storing a new set of
2 constraints comprises storing a new forward-looking rules table.

1 6. (Original) The method of claim 2, wherein the input is received from an
2 inference engine.

1 7. (Original) The method of claim 2, wherein the selection of one of the
2 plurality of selectable objects, and of a slot in which the selected object may be placed, is
3 received via a user interface.

1 8. (Original) The method of claim 2, wherein the received input is
2 implemented in a user interface.

1 9. (Original) A system for visually configuring a product from a plurality of
2 selectable components, comprising:

3 a user interface for displaying the plurality of selectable components and a
4 plurality of slots into which the plurality of selectable components can be placed; and

5 a user intelligence communicatively coupled to the user interface, for receiving a
6 set of constraints from a remote inference engine and implementing the set of constraints.

1 10. (Original) The system of claim 9, wherein the visual user interface
2 comprises: donors depicting the plurality of selectable components;

3 receptors depicting the plurality of slots into which the donors can be placed;

4 a graphical manipulation enabler for implementing drag and drop behavior of the
5 donors into the receptors; and

6 a configuration conflicts displayer, for updating a visual display responsive to at
7 least one of the plurality of donors being put into at least one of the plurality of slots such that at
8 least one constraint stored on the user intelligence is violated.

1 11. (Original) The system of claim 9, wherein the user intelligence comprises:
2 an interpreter for receiving a set of constraints from an inference engine; a storage
3 for storing the set of constraints;
4 an implementor for implementing the forward-looking rules stored in the table;
5 and
6 an encoder for encoding and sending data regarding a user's current selection
7 from the plurality of donors and the plurality of receptors to the inference engine.

1 12. (Original) A system for visually configuring a product from a plurality of
2 selectable components, comprising:
3 on a client device:
4 a visual user interface for displaying the plurality of selectable components and a
5 plurality of slots into which the plurality of selectable components can be placed;
6 a user intelligence communicatively coupled to the visual user interface for
7 determining, by using a forward-looking rules table, the validity of placement of one of
8 the plurality of selectable components into one of the plurality of slots; and
9 on a remote host device:
10 an inference engine communicatively coupled to the user intelligence, for storing
11 rules and constraints governing placement of the plurality of selectable components, and
12 for generating the forward-looking rules table.

1 13. (Original) The system of claim 12, wherein the client device further
2 comprises a web browser which is communicatively coupled to the remote host device via a
3 network service.

1 14. (Original) A computer program embodied in a tangible medium and
2 capable of being executed by a computer for performing a method for visually configuring a
3 product by placing a plurality of selectable components into a plurality of slots, comprising:
4 (a) initializing a configuration layout with proper state;

(b) receiving a selection of one of the plurality of selectable objects, and of one of the plurality of slots in which the selected object may be placed;

(c) providing visual feedback indicating a validity of the selections;

(d) receiving a placement of the selected object;

(e) receiving input regarding the placement from a remote inference engine;

(f) updating the visual feedback as needed based on the received input; and

(g) repeating steps (b) through (f) until no more selections are received.

15. (Original) A computer program embodied in a tangible medium and capable of being executed by a computer for performing a method for visually configuring a product by placing a plurality of selectable components into a plurality of slots, comprising:

(a) initializing a configuration layout with proper state;

(b) receiving a selection of one of the plurality of selectable objects, and of one of the plurality of slots in which the selected object may be placed;

(c) looking up a set of constraints on the placement of the selected object;

(d) receiving a placement of the selected object;

(e) receiving input regarding the placement from a remote inference engine;

(f) implementing the received input;

(g) storing a new set of constraints based on the placement of the selected object; and

(h) repeating steps (b) through (g) until no more selections are received.

16. (Previously Presented) A method of visually configuring a product by placing one or more of a plurality of objects into one or more slots, subject to a plurality of configuration rules, the method comprising:

(a) providing the plurality of objects and a predetermined product configuration layout to a client device for display within a graphical user interface, the product configuration layout including the one or more slots;

(b) receiving, from the client device, a selection of one of the plurality of objects displayed within the graphical user interface and a selection of one of the one or more

9 slots, the selection of the one of the plurality of objects and the selection of one of the one or
10 more slots being for modification of the product configuration layout;

11 (c) causing the graphical user interface to indicate that the selected object
12 cannot be placed in the selected slot, if placing the selected object in the selected slot would
13 violate one or more of the plurality of configuration rules; and

14 (d) causing the graphical user interface to show the selected object within the
15 selected slot, if placing the selected object in the selected slot would not violate any of the
16 plurality of configuration rules.

1 17. (Previously Presented) The method of claim 16, wherein the plurality of
2 configuration rules allow a finite number of valid product configuration layouts.

1 18. (Previously Presented) The method of claim 16 wherein a forward-looking
2 rules table is used to determine if placing the selected object in the selected slot would violate
3 one or more of the plurality of configuration rules.

1 19. (Previously Presented) The method of claim 16 wherein a user intelligence
2 stored on the client device is used to determine if placing the selected object in the selected slot
3 would violate one or more of the plurality of configuration rules.

1 20. (Previously Presented) The method of claim 16 wherein an inference
2 engine on a server is used to determine if placing the selected object in the selected slot would
3 violate one or more of the plurality of configuration rules, the server being configured for
4 receiving the selection of one of the plurality of objects.

1 21. (Previously Presented) The method of claim 16 wherein the selection of
2 one of the plurality of objects and the selection of one of the one or more slots includes dragging
3 the one of the plurality of objects to the one of the one or more slots within, the graphical user
4 interface.

1 22. (Previously Presented) The method of claim 16 wherein the selection of
2 one of the plurality of objects and the selection of one of the one or more slots includes dragging
3 the one of the plurality of objects to the one of the one or more slots within the graphical user
4 interface, and wherein causing the graphical user interface to indicate that the selected object
5 cannot be placed in the selected slot includes not allowing the dragged one of the plurality of
6 objects to be dropped in the one of the one or more slots.

1 23. (Previously Presented) The method of claim 16 wherein the configuration
2 layout is representative of a physical layout of the product.

1 24. (Previously Presented) A method of visually configuring a product by
2 placing one or more of a plurality of objects into a slot, the method comprising:
3 providing a product configuration layout to a client device for display within I a
4 graphical user interface, the product configuration layout including a slot for placement of one of
5 the plurality of objects;
6 providing the plurality of objects to the client device for display within the
7 graphical user interface;
8 receiving, from the client device, a selection of one of the plurality of selectable
9 objects for placement within the slot;
10 causing the graphical user interface to show the selected selectable object within
11 the slot if the selected object can be placed in the slot without violating a configuration rule; and
12 causing the graphical user interface to indicate that the selected object cannot be
13 placed in the slot, if placing the selected object in the selected slot would violate the
14 configuration rule.

1 25. (Previously Presented) The method of claim 24, wherein providing a
2 product configuration layout and providing the plurality of selectable objects are performed in
3 one step.

1 26. (Previously Presented) The method of claim 24, wherein the slot is
2 predetermined.

1 27. (Previously Presented) The method of claim 24, wherein the slot is
2 selected from a plurality of slots included in the product configuration layout.

1 28. (Previously Presented) The method of claim 24, wherein the slot is
2 selected from a plurality of slots included in the product configuration layout, the plurality of
3 slots being representative of physical locations within the product.

1 29. (Previously Presented) A method of configuring a product for purchase,
2 the method comprising:

3 selecting the product for purchase, the product having a plurality of alternative
4 configurations, the plurality of alternative configurations being limited by a plurality of
5 configuration rules;

6 viewing a first configuration of the plurality of alternative configurations and a
7 plurality of objects, within a graphical user interface, the viewed first configuration including
8 one or more slots within which at least one of the plurality of objects may be placed;

9 specifying a second configuration of the selected product by selecting a first of
10 the plurality of objects for placement in a first of the one or more slots, the placement of the first
11 of the plurality of objects in the first of the one or more slots being limited by a subset of the
12 plurality of configuration rules, the selection of the first of the plurality of objects being made
13 using the graphical user interface.

1 30. (Previously Presented) The method of claim 29, wherein the subset of the
2 plurality of configuration rules is determined based on the first configuration.

1 31. (Previously Presented) The method of claim 29 further including selecting
2 the first of the one or more slots by dragging the first of the plurality of objects to the first of the
3 one or more slots, within the graphical user interface.

1 32. (Previously Presented) The method of claim 29, wherein the plurality of
2 alternative configurations includes a finite number of alternative configurations, the finite
3 number being determined in part by the plurality of configuration rules.

1 33. (Previously Presented) The method of claim 1, wherein the selection of
2 one of the plurality of selectable objects affects a validity of a selection of another of the
3 plurality of selectable objects and a selection of another of the plurality of slots.

1 34. (Previously Presented) The method of claim 1, wherein the selection of
2 one of the plurality of selectable objects occurred prior to the selection of one of the plurality of
3 slots.

1 35. (Previously Presented) The method of claim 16, wherein causing the
2 graphical interface to indicate that the selected object cannot be placed in the selected slot occurs
3 while attempting to place the selected object in the selected slot.